I have been given a review of Standard 1910.93c Vinyl Chloride.

Signed: E. D. Brittingham

Date: 9-17-76

Review Next: 9-17-77

(3)

LOUISIANA DIVISION GLYCOL I

PERSONNEL EXPOSURE DATA SHEET

NAME E. Brittingham CLASSIFICATION Ass't Chemist

DATE	TIME	COMPOUNDS MEASURED	PPM MOLE 8 HR T.W.A	PPM MOLE 15 MINUTE EXCURSION	JOB
3-5-75	8hr	VCL	7.2ppm		Working in Vinyl Restricted area, ON area Monit and C.L.R.
4-3-75	15min	VCL		N/D	Walking ONC.. To Recieve a sample
4-9-75	15 min	VCL		.43	WALKING ON C L TO RECIEVE S
12-17-75	8 hr	VCL	0.33		INST. REPAIR ON C.
9-7-76	30 min	VCl		1.22	Observing Loading Proc

DO 077222
CONFIDENTIAL

PERSONNEL WORK SHEET

DATE: 9-7-76

NAME: E. BRITTINGHAM

PUMP: 2113

TUBE: #10

PUMP FACTOR: .60

TYPE OF SAMPLE: 30 MIN

JOB ANALYSIS: observing Loading procedure on Vinyl end of C.L.R.

A = Chromatagraph Factor: .00005259

B = Peak Ht. of Sample: 20.5

C = Vol. of CS_2 Used: 20 mls.

D = Efficiency: 100

E = Vol. of Air Pumped: 6.32

F = M.W. of Compound: 62.5

Constants = 22.4 L/Mole and 1000

Pump Stop # 575460
Pump Start # - 564919
PUMP UNITS = 10541

Pump Units 10541
Pump Factor X .60
C.C. OF AIR = 6324

Liters $\frac{6324}{1000}$ cc = 6.32

FORMULA: $ppm\ (X) = \frac{(A)(B)(C)(22.4L/Mole)(1000)}{(M.W)(D)(E)}$

VCL ppm $= \frac{(\ A\ )(20.5)(448,000)}{(62.5)(\ 1\ )(6.32)}$

VCl ppm $= \frac{482.98}{395}$

Vcl ppm = 1.22

DO 077223
CONFIDENTIAL

DATE: 12-17-75

NAME: E. BRITTINGHAM

PUMP: 1056

TUBE: #13

PUMP FACTOR: 0.620

TYPE of SAMPLE: 8 hr.

PUMP STOP # 200513

" START # 148869

Δ PUMP UNITS 51644

Δ PUMP UNITS = 51644

PUMP FACTOR X 0.620

C.C. of AIR = 32019 cc

LITERS = $\frac{32019 \text{ cc}}{1000} = 32.0$

DO 077224
CONFIDENTIAL

LAB ANALYSIS:

WORKING ON INSTRUMENT AT C.I.R., RUNNING SAMPLES - THRU INST. ABOUT 6 hrs out of 8 hrs.

$$\text{PPM VCL} = \frac{(A)(B)(C)(22.4 \text{ L/mole})(1000)}{(\text{M.W.})(D)(E)}$$

$$= \frac{(0.000373)(4)(448{,}000)}{(62.5)(1)(32.0)}$$

A = CHROMATAGRAPH FACTOR = 0.000373

B = PEAK HT. of SAMPLE = 4 DIV

C = VOL. of CS_2 USED = 20 m/s

D = EFFICIENCY = 100% = 1

E = VOL. of AIR PUMPED = 32.0

M.W. of Vinyl Chloride = 62.5

CONSTANTS = 22.4 L/mole, 1000

$$= \frac{668.4}{2000}$$

$$= 0.33 \text{ ppm VCL}$$

I have been given a review of Standard 1910.93q Vinyl Chloride.

Signed: E D. Brittingham

Date: 12-3-75

Review Next: _____

I have been given a review of Standard 1910.93q Vinyl Chloride.

Signed: Everett D. Bittinghaus

Date: 4-25-75

Review Next: APRIL 1976

It is my opinion that I have been properly trained with regard to the hazards of vinyl chloride and precautions for its safe use.

Signed: Everett D. Brittingham

Date: 4-25-75

Training as described in Permanent Standard 1910.93q for all personnel involved in the production and/or handling of vinyl chloride and/or maintaining equipment that has contained/contains vinyl chloride.

Name Everett D. Brittingham

		Date	By
1.	The nature of the health hazard from chronic exposure to vinyl chloride including specifically the carcinogenic hazard.	4-25-75	L.E.Day
2. *	The specific nature of operations which could result in exposure to vinyl chloride in excess of the permissible limit and necessary protective steps.	4-25-75	L.E.Day
3.	The purpose for, proper use, and limitations of respiratory protective devices.	4-25-75	L.E.Day
4.	The fire hazard and acute toxicity of vinyl chloride and the necessary protective steps.	4-25-75	L.E.Day
5.	The purpose for, and a description of, the monitoring program.	4-25-75	L.E.Day
6.	The purpose for, and a description of, the medical surveillance program.	4-25-75	L.E.Day
7.	Emergency procedures.	4-25-75	L.E.Day
8.	Specific information to aid the employee in recognition of conditions which may result in the release of vinyl chloride.	4-25-75	L.E.Day
9.	A review of Standard at employee's first training and indoctrination program and annually thereafter.	4-25-75	L.E.Day

Supervisor L E Day

* Catching and running vinyl samples; breaking into or entering equipment that has contained/contains vinyl.

DO 077228
CONFIDENTIAL

I have been given a review of Standard 1910.93q Vinyl Chloride.

Signed: E. D. Brittingham

Date: 12-5-74

Review Next: _____

DO 077229
CONFIDENTIAL

DATE: 4-9-75 Pump Stop # 242920 A Pump Units 6124
NAME: E. Brittingham " Start # 236796 Pump Factor X .570
Pump: 1056 A Pump Units 6124 C.C. of Air = 3490
TUBE: 3
PUMP FACTOR: .570
TYPE of SAMPLE: 15 min.

LITERS = $\frac{3490 cc}{1000} = 3.490$

JOB ANALYSIS:

$$ppm\ V_c = \frac{(A)(B)(C)(22.4\ L/mole)(1000)}{(m.w.)(D)(E)}$$

$$\frac{(.00021)(1)(20)(22.4)(1000)}{(62.5)(1)(3.490)}$$

A = CHROMATAGRAPH FACTOR = .00021
B = PEAK HT. of SAMPLE = 1
C = VOL. of CS_2 USED = 20 ml
D = EFFICIENCY = 100% = 1
E = VOL. of AIR PUMPED = 3.490
m.w. of Vinyl Chloride = 62.5
CONSTANTS: 22.4 L/mole
1000

$$\frac{94.09}{218.12} = .43$$

DO 077230
CONFIDENTIAL

DATE: 4-3-25
NAME: E Brettingham
PUMP: 10-5
TUBE: 7
PUMP FACTOR: .580
TYPE of SAMPLE: 15 min
JOB ANALYSIS:

Pump Start # 737255
" Stop # 729670
A Pump Units 7585

A Pump Units. 7585
Pump Factor. X .580
C.C. of Air = 4399

DO 077231
CONFIDENTIAL

$$\text{Liters} = \frac{4.399 \text{ cc}}{1000} = 4.399$$

$$\text{ppm Vol} = \frac{(A)(B)(C)(22.4 \text{ L/mole})(1000)}{(\text{M.W.})(D)(E)}$$

N.D.

A = CHROMATAGRAM FACTOR = .000195
B = PEAK HT. of SAMPLE = 0
C = VOL. of CS_2 USED = 20 m/s
D = EFFICIENCY = 100% = 1
E = VOL. of AIR PUMPED = 4.399
M.W. of Vinyl Chloride = 62.5
CONSTANTS: 22.4 L/mole
1000

PERSONNEL EXPOSURE DATA SHEET

GLYCOL I

NAME E. Brittingham CLASSIFICATION _____ DATE 3-5-75 TIME 8hr

	COMPOUNDS MEASURED	PPM MOLE 8 HOUR T.W.A.	PPM MOLE 15 MINUTE EXCURSION
1.	VCL	↘ 7.2 PPM	
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

REMARKS:

working in vinyl restricted area on area monitor and cvk.

Pump 0418 Tube 1 STOP 922797 START 901248

.547 (21549) 11.78 Liters of Air

DO 077232
CONFIDENTIAL

3-5-15

Brittingham

$$\frac{62.720(85)}{62.5(11.78)} = \frac{5331.2}{736.25} = 7.2 \text{ PPM.}$$

85 D:1

10461
1164